This Page Is Inserted by IFW Operations and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

As rescanning documents will not correct images, please do not report the images to the Image Problem Mailbox.

REMARKS

This paper is responsive to the Office Action mailed November 7, 2001 (paper no. 5). Reconsideration and allowance are respectfully requested. Claims 1-6, 8-28, and 35-51 are now pending. By this Amendment, claims 7 and 29-34 are canceled without prejudice or disclaimer, claims 1 and 13 are amended, and new claims 41-51 are added. The specification is also amended to correct typographical errors. No new matter has been added.

Preliminarily, Applicant's representative wishes to thank Examiner Fureman for taking the time to conduct a personal interview on February 13, 2002. During the interview, claims 1 and 35 were discussed with regard to the asserted art. No agreement was reached during the interview as to the immediate allowability of the pending claims; the Examiner stated that he would reconsider based on Applicant's written response to the Office Action.

Claims 1-5, 7-17, 19-31, 33-37, 39, and 40 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,386,490 to Pan et al. ("Pan") in view of JP 11-119067 to Fujikura LTD et al. ("Fujikura"). Claims 6, 18, 32, and 38 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Pan in view of Fujikura, and further in view of U.S. Patent No. 6,206,583 to Hishikawa et al. ("Hishikawa").

Pan discloses an automated workstation for the manufacture of optical fiber couplers. The workstation collects data from the manufacturing process into a database. (Pan, col. 8, lns. 55-56). From the specified records and fields of the database, yield, quality distribution, productivity, and diagnostics are provided by the manufactures coupler units. (Pan, col. 8, lns. 56-59).

Claim 1 is amended only to incorporate all of the features of now-canceled claim 7. Claim 1 recites an apparatus for receiving splice data for each of a plurality of optical fiber splices, each of the plurality of optical fiber splices being uniquely identified by at least one of a plurality of splice indicia. As amended, claim 1 recites that the apparatus includes, *inter alia*, a data storage device coupled with a data interface, for receiving the splice data and the splice indicia from the data interface and for storing the splice data and the splice indicia, wherein the splice data includes cross reference information representing a cross reference between one of the plurality of optical fiber splices and another one of the plurality of optical fiber splices.

Pan fails to teach or suggest cross reference information as recited in claim 1. In addressing this feature, the Office Action appears to argue that Pan discloses that data is stored for each coupler indicating the particular station and operator that manufactured that coupler. *See*, Office Action, p. 3. Without conceding the accuracy of that argument, Applicant respectfully submits that this still does not teach or suggest cross referencing between one of the plurality of optical fiber splices and another one of the plurality of optical fiber splices. For example, referring to Fig. 2 of the present application, the splice data for splice indicium 31B04 may include, e.g., image data 201, an estimated optical loss of 0.09 dB, cleave angles of 0.21 and 0.32 degrees, a splice program of 1, a date/time of manufacture of 2/25/99 at 11:53 a.m., an operator of Jones, a splicer number of 2, an installed location of 103-A1-B23, and a cross reference of splice indicia 31B04 and 31B06. Thus, the splice data associated with splice indicia 31B04 is cross-referenced to splice indicium 31B06. *See also*, specification, p. 18, ln. 18, to p. 19, ln. 1. In contrast, Pan may disclose storing data

associated with each coupler itself, but not storing a cross-reference to another coupler.

For at least this reason, neither reference teaches or suggests, either alone or in any combination, the above-discussed feature of claim 1.

Claims 2-6 and 8-12, which depend from claim 1, are also allowable for at least those reasons discussed above with regard to claim 1, and further in view of the additional features recited therein.

Independent claim 13 recites an apparatus for selecting splice data for an optical fiber splice based on a selected splice indicium from a plurality of unique splice indicia, the selected splice indicium uniquely identifying the optical fiber splice. As amended to correct a typographical error, claim 13 recites that the apparatus includes, *inter alia*, an input data interface for receiving the selected splice indicium, and a processor for retrieving from a data storage device splice data associated with the selected splice indicium.

The Office Action asserts that the coupler number of Pan (referred to near the top of Figure 9A) corresponds to the claimed splice indicia, and implies that a particular coupler number is selected in order to retrieve associated data. Pan discloses that a Display Qualified Records file and a Print Qualified Records file respectively display and print out the records from a Qualified Records Data file. (Pan, col. 8, ln. 67, to col. 9, ln. 2; Figures 9A and 9B). The bottom of Figure 9A of Pan states that the Display Qualified Records file displays qualified record data of a specific record number. The middle of Figure 9A also states that the Qualified Records Data File contains record numbers. However, the record number is not the same as the coupler number referred to near the top of Figure 9A. Pan is anything but clear as to how the various database programs and files work (the

only description in the entire patent being at col. 8, ln. 60, to col. 9, ln. 2). However, it is clear that Pan fails to teach or suggest that data is retrieved based on a selected <u>coupler number</u>. Thus, Pan fails to teach or suggest an input data interface for receiving a selected splice indicium, and a processor for retrieving from a data storage device splice data associated with the selected splice indicium, as recited in claim 13.

Fujikara fails to overcome the deficiencies of Pan, and so neither reference, either alone or in any combination, teaches or suggests the above-discussed feature of claim 13.

Independent claim 35 is also allowable for at least similar reasons as those discussed above with regard to claim 13, and further in view of the various features recited therein.

Claims 14-28, which depend from claim 13, and claims 36-40, which depend from claim 35, are also allowable for at least those reasons discussed above with regard to their respective independent claims, and further in view of the additional features recited therein.

Fujikara simply fails to overcome the deficiencies of Pan; Fujikara fails to teach or suggest splice data including cross reference information representing a cross reference between one of the plurality of optical fiber splices and another one of the plurality of optical fiber splices

Applicants further traverse the proposed combination of Pan and Fujikara. Pan discloses an automated workstation for the manufacture of optical fiber couplers. As previously discussed, specific database record numbers may be selected in order to display qualified record data thereof. Fujikara discloses using bar codes to identify optical fibers. The prior art provide no motivation to utilize the optical fiber bar codes of Fujikara with the coupler manufacturing workstation of Pan.

First of all, the user of Pan's workstation would enter database record numbers to retrieve data, not coupler numbers (as discussed above). Second, the workstation of Pan is clearly intended for manufacturing and is not a portable device, so there is no reason to modify Pan to have a bar code reader to read from optical fibers that have already been manufactured and installed. Third, Fujikara does not teach or suggest that a plurality of optical fiber splices are uniquely identified by at least one of a plurality of splice indicia. Instead, Fujikara discloses that optical fibers themselves (not the splices connecting the fibers) are identified by the bar codes (as stated in the English-language abstract of Fujikara in the IDS submitted herewith, "fiber identification symbols"). Since the workstation of Pan deals with couplers, there is no reason to combine Pan with a system that reads bar codes that identify fibers (not couplers).

New claims 41-51 are also allowable over the art of record. For example, none of the art of record teaches or suggests a method for retrieving splice data for a splice, the method comprising the steps of reading a first splice indicium from a first splice, comparing the first splice indicium with a plurality of stored splice indicia including the first splice indicium, each of the stored splice indicia having associated splice data, and retrieving splice data associated with the first splice indicium, as recited in new independent claim 41.

Applicant respectfully traverses the Official Notice taken in the Office Action, and under MPEP § 2144.03 requests that references be cited in support thereof should such Official Notice be relied upon in a future Office Action. Applicant cannot fairly evaluate the propriety of any proposed

Clark - U.S. Serial No. 09/429,641

combinations of Official Notice with the asserted references without having the opportunity to

physically examine references supporting such Official Notice.

Finally, in rejecting independent claims 1, 13, and 35, the Office Action states that "Pan et al.

fails to specifically teach each of the optical fiber splices being uniquely identified by at least one of

a plurality of splice indicia (the optical fiber splice having indicia thereon)." Applicant wishes to

clarify for the record that none of independent claims 1, 13, or 35 require an optical fiber splice

having indicia "thereon."

All of the rejections having been addressed, Applicant respectfully requests allowance of the

present application and timely notification of the same. Should the Examiner have any questions or

comments, the Examiner is invited to contact the undersigned at the number below.

Respectfully submitted,

Dated: February 22, 2002

By:

Jordan N. Bodner

Registration No. 42,338

BANNER & WITCOFF, LTD 1001 G Street, N.W. Eleventh Floor

Washington, D.C. 20001

(202) 508-9100

- 12 -

MARKED-UP VERSION OF AMENDED SPECIFICATION

Page 18, paragraph beginning at line 8:

In operation, the data collection system 300 may be used to selectively retrieve splice data associated with a particular splice. A user of the data collection system 300 may input a selected splice indicium that uniquely identifies that particular splice (e.g., using a keypad, the bar code reader 301, or any other input device 308. The processor 103 may access the memory 305 and/or the storage device 122 to retrieve splice data therefrom that is associated with the splice indicium (e.g., splice data that is in the same data record as the splice indicium). For example, a user may use the bar code reader 301 to scan in the splice indicium "31B05." Responsive to splice indicium 31B05 being scanned in, splice indicium 31B05 may be sent through the interface 302 to the processor 103 in the data collection system 300. The processor 103 may access the memory 305 and/or the storage device 122 to retrieve the splice data associated with splice indicium 31B05. Referring to Fig. 2, that splice data that is retrieved may include, e.g., image data 201, an estimate estimated optical loss of 0.09 dB, a cleave angles of 0.21 and 0.32 degrees, a splice program of 1, a date/time of manufacture of 2/25/99 at 11:53 a.m., an operator of Jones, a splicer number of 2, an installed location of 103-A1-B23, and a cross reference of splice indicia 31B04 and 31B06.

MARKED-UP VERSION OF AMENDED CLAIMS

1. (Amended) An apparatus for receiving splice data for each of a plurality of optical fiber splices, each of the plurality of optical fiber splices being uniquely identified by at least one of a plurality of splice indicia, the apparatus comprising:

a data interface for receiving the splice data; and

a data storage device coupled with the data interface, for receiving the splice data and the splice indicia from the data interface and for storing the splice data and the splice indicia, wherein the splice data includes cross reference information representing a cross reference between one of the plurality of optical fiber splices and another one of the plurality of optical fiber splices.

13. (Amended) An apparatus for selecting splice data for an optical fiber splice based on a selected splice indicium from a plurality of unique splice indicia, the selected splice indicium uniquely identifying the optical fiber splice, the apparatus comprising:

a an input data interface for receiving the selected splice indicium;

a data storage device coupled with the input data interface for storing the splice data and the plurality of splice indicia;

a processor coupled with the data storage device for retrieving from the data storage device the splice data associated with the selected splice indicium; and an output data interface for outputting the splice data.